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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,835	07/30/2003	Shigeru Furumiya	2003_1063	7274

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,835	FURUMIYA ET AL.	
	Examiner	Art Unit	
	Kim-Kwok CHU	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 6/27/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/582,675.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Remarks

1. Applicant's Amendment filed on June 27, 2006 has been fully considered but it is not persuasive.

In the Remarks, page 6, line 10, the term "U.S. 6411,515" is a typo error and it should be --U.S. 6,356,515--.

In the Remarks, page 7, line 17, the term "claims 5 and 10-12" is a typo error because there are no claims 5 and 10-12 in Applicant's specification.

With respect to the present Claims 1, 2 and 11, Applicant states that the prior art of Spruit's method of determining an optimal write intensity E does not contemplate using recording pulse position information (page 7 of the Remarks, lines 15 and 16). Instead, Applicant states that his invention controls a recording position by pulse position (page 7 of the Remarks, lines 17 and 18). Accordingly, the prior art of Spruit writes optically detectable marks in form of a test information pattern in the sectors of a recording medium. This test information pattern is coded/modulated and therefore contains specific mark position information such as pulse length, pulse width etc. (Fig. 3C; column 5, lines 42-49). Therefore, similar to Applicant's claimed limitations, the prior art of Spruit controls a recording position of recorded pulses with parameters obtained from a recorded test pattern by extracting the encoded test pattern during a read operation and then

compared it with the original pattern to determined an Byte Error Rate (column 6, lines 1-34). In other words, the recording of the prior art of Spruit's test pattern determines how the space and length of a series of modulated marks should be written in the future write operation so that a predetermined reliability in term of the Byte Error Rate can be achieved.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 and 3 respectively of U.S. Patent No. 6,791,926. Although the conflicting claims are not identical, they are not patentably distinct from each other.

4. With respect to the present claims 1 and 2, the '926 patent's claims 1 and 2 have every limitation of the present claims except that the terms "position information" are replaced by the terms "the recording pulse position information". These changes are obvious limitations because it

is made to clarify "the position information" containing the recording pulse.

Furthermore, the '926 patent's claims 1 and 2 have every limitation of the present claims except that the terms "standard recording pulse" are replaced by the terms "the recording pulse". These changes are obvious limitations because a standard recording pulse such as 1 or 0 is a recording pulse in a digital recording standard.

5. With respect to the present newly added Claim 11, the '926 patent's claim 3 has every limitation of the present claim 11 except a storing device. The present storing device is an obvious limitation because Claims 3 inherently includes a storing device in the test writing devices so that recording pulse position information can be selected and then recorded on the optical disc.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

7. Claims 1, 2 and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Spruit et al. (U.S. Patent 5,617,399).

8. Spruit teaches a recording apparatus having all of the steps as recited in claims 1 and 2. For example, Spruit teaches the following:

(a) With respect to Claim 1, obtaining a recording pulse parameter by reading recording pulse parameters from a writable optical disc 1 to which are prerecorded recording pulse parameters (test pattern) defining recording pulse position information for each of plural mark length and space length combinations (Figs. 8 and 9; column 1, lines 23-30); performing a first test write to the optical disc using recording pulse position information (modulated/encoded pulses) for all mark length and space length combinations in the recording pulse parameters (Fig. 5; step S3; abstract; test pattern is encoded and contains pulse information such as mark length, mark space

etc.); reproducing the first test write (decoding) and detecting a first jitter (error) from the reproduced signal (Fig. 5; steps S4 and S5; ER is the result of jitter); adding a first specific amount (intensity) of change uniformly to the recording pulse position information for all mark length and space length combinations in the recording pulse parameters (Fig. 5; steps S6 or S13; recording intensity controls the mark length and space); performing a second test write to the optical disc using the uniformly changed recording pulse position information (Fig. 5, steps S6, S7 and S3; test write is repeated); reproducing the second test write and detecting a second jitter from the reproduced signal (Fig. 5; step S5; error of the second test write is being judged again); comparing the first jitter and second jitter and selecting the recording pulse position information used for the test write with less jitter (Fig. 5, steps S9 or S15).

(b) With respect to Claim 2, adding a second specific amount of change uniformly to the recording pulse position information for all mark length and space length combinations in the recording pulse parameters (Fig. 5; light intensity is determined by writing a test pattern; column 2, lines 18-27); performing a third test write to the optical disc using the uniformly changed recording pulse position information; reproducing the third test write and detecting a third jitter

from the reproduced signal (Fig. 5; test pattern is repeatedly written and read in order to set the light intensity within a determined range; column 8, lines 44-51); and comparing the first jitter (error rate), second jitter and third jitter, and selecting the recording pulse position information used for the test write with least jitter (Fig. 5; test pattern is repeatedly written and read in order to set the light intensity within a determined range; column 8, lines 44-51).

9. Spruit teaches a recording apparatus having all of the elements and means as recited in claim 11. For example, Spruit teaches the following:

(a) With respect to Claim 11, an apparatus for obtaining a recording pulse parameter (test pattern) by reading recording pulse parameters (marks lengths and space in the test pattern) from a writable optical disc 1 to which are prerecorded recording pulse parameters defining recording pulse position information (modulated/encoded test pattern) for each of plural combinations of mark length and space length (Fig. 2); a storing device 19b operable to store the recording pulse position information (Fig. 2); a test writing device 16 operable to perform a test write to the optical disc 1 using the recording pulse information stored in the storing device 19b (Figs. 2 and 3C); a jitter detector operable to reproduce the test write and to detect a jitter from the reproduced signal (Figs. 2 and 5; step S4; column 6, lines 5-12); a correction device operable to add a specific amount of change uniformly to the recording pulse position information for all mark length and space length combinations stored in the storing device so as to uniformly change the recording pulse position information (Figs. 2 and 5; steps S5, S6, S11, S13; column 6, lines 5-12); a controller 19a operable to control the test writing device and the jitter detector to repeat the test

writing and the jitter detection when the recording pulse position information is changed to obtain plural jitters (Figs. 2 and 5); and a selection device 19a operable to compare the plural jitters, and to select the recording pulse position information used for the test write with less jitter (Figs. 2 and 5; steps S5, S6, S11, S13; column 6, lines 5-12).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ide et al. (5,513,165) is pertinent because Ide teaches a method of controlling the recording pulse with a test pattern.

Chung et al. (4,873,680) is pertinent because Chung teaches a method for detecting and compensating pit extension in an optical disk.

11. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

kc 9/6/2006

Examiner AU2627
September 6, 2006

(571) 272-7585

William Korzuch
WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600